REMARKS

The Official Action of 7 October 2005 has been carefully considered and reconsideration of the application as amended is respectfully requested.

In response to the restriction requirement appearing at paragraph 1 of the Official Action, Applicants hereby affirm their election to prosecute in the present application the claims of Group I, i.e., claims 1-15 and 17-20. Nevertheless, Applicants respectfully traverse the requirement insofar as claim 16 recites "the catalyst according to claim 15", so that the process as claimed in claim 16 cannot be practiced with another catalyst materially different from the catalyst according to claim 15, because a process using, for example a metallocene catalyst does not fall within the scope of claim 16. Thus, the applicants respectfully submit that the claims are related, and it would not impose an undue burden on the Examiner to maintain each of the claims in the present appilcation. Accordingly, Applicants respectfully request that the requirement for restriction be withdrawn.

In any event, upon allowance of the claim to the product, Applicants respectfully request rejoinder of any process claim that depends from or otherwise contains the limitations of an allowed product claim in accordance with the provisions of MPEP Section 821.04.

The Abstract has been amended to remove the bases for the objections appearing at paragraph 6 of the Official Action.

The claims have been amended to remove the bases for the rejections under 35 USC 112, second paragraph in accordance with the suggestions courteously made by the Examiner at paragraph 7 of the Official Action, with the exception that the numbering of the groups in the periodic table has not been changed. With respect to this exception, Applicants respectfully submit that, pursuant to the provisions of MPEP Section 2173.01, they are entitled to define in the claims what they regard as their invention essentially in whatever terms they choose so long as any special meaning assigned to a term is clearly set forth in the specification. In the present case, the numbering of the groups in the periodic table used in the application is in line with the Mendeleev Periodic Table commonly used in the art such that the meaning of the numbering would be clear to those of skill in the art (see, for example, US Patent 4,558,025 cited by the Examiner). Under these circumstances, it is respectfully submitted that these recitations, as well as all of the other recitations in the claims as amended, are sufficiently definite to satisfy the dictates of 35 USC 112, second paragraph.

New claims 22 and 23 have been added more completely to define the subject matter which the Applicants regard as their invention. These claims use the "consists of" transitional to close the claimed catalyst component (claim 22) and catalyst (claim 23) to components other than those claimed (see MPEP Section 2111.03).

The claims have been rejected under 35 USC 102(b) as allegedly being anticipated by either Best or Furuhashi et al. Applicants respectfully traverse these rejections.

The claimed catalyst component of the invention comprises an inorganic oxide support, and at least one alkyl metal compound, at least one halide, at least one dihydrocarbyl magnesium compound, at least one difunctional compound that reacts with the dihydrocarbyl magnesium compound, and at least one titanium compound, which are supported on the support, wherein the alkyl metal compound is represented by the formula (I) as defined, the halide is a C_1-C_{20} alkyl halide or a compound represented by the formula (II) as defined, and the difunctional compund is a mono-, di- or multi-halogenated alcohol or phenol having from 2 to 20 carbon atoms; or a mono-, di- or multi-halogenated acyl halide having from 2 to 20 carbon atoms.

Best describes a catalyst component comprising a solid reaction product obtained by treating an inert solid support material in an inert solvent sequentially with (A) an organometallic compound of a Group IIA, IIB or IIIA metal of the Periodic Table, (B) an oxygen containing compound selected from ketones, aldehydes, alcohols, siloxanes or mixtures thereof, (c) an acyl halide, (D) at least one transition metal compound of a Group IVB, VB, VIB or VIII metal of Periodic Table, and (E) a Group IIIA metal hydrocarbyl dihalide (see claim 1 of Best).

Best does not show or suggest at least the following components of the claimed invention: (1) the alkyl metal compound represented by the formula (I) as recited in the claims, which differs from (E) a Group IIIa metal hydrocarbyl dihalide as described by Best; or (2) the claimed difunctional compound, namely the recited halogenated alcohol or phenol, or the recited halogenated acyl halide, which differ from the monofunctional acyl halide described by Best. Moreover, the claimed catalyst component as defined, for example, in claims 22 and 23 excludes (B) an oxygen containing compound selected from ketones, aldehydes, alcohols, siloxanes or mixtures thereof, that is required by Best.

Furuhashi et al describe a catalyst component which is prepared by contacting (1) a contact reaction product of (a) a metal oxide, (b) a dihydrocarbyl magnesium, and (c) a halogen-containing alcohol, with (d) an electron-donating compound and (e) a titanium compound.

Furuhashi et al do not show or suggest the claimed alkyl metal compound represented by the formula (I) as recited in the claims, which compound imparts desired properties to the catalyst component, such as lower static charges (see present specification at page 2, last paragraph). Moreover, the claimed catalyst component as defined, for example, in claims 22 and 23 excludes (d) the electron-donating compound that is required by Furuhashi et al.

In view of the above, it is respectfully submitted that the catalyst components described in the cited references cannot be considered to anticipate the claims under 35 USC 102(b). Moreover, the references cannot render obvious the claimed catalyst component either. For one thing, there would not have been any motivation, either in the references themselves or in the prior art as a whole, to modify the references to arrive at the claimed invention. For another, even if there had been a motivation in the prior art to modify the references, there would not have been a reasonable expectation of success. Finally, even if there had been a proper motivation and a reasonable expectation of success, as would be required to set forth a *prima facie* case of obviousness (see MPEP Section 706.02(j)), the evidence of record in the specification would be sufficient to rebut such *prima facie* case.

Catalysis belongs to a field with results being very difficult to be predicted. Different catalysts prepared by different processes or from different raw materials, even those prepared from the same raw materials by similar processes but in different reaction orders, are known to often exhibit quite different properties, even though they might have the same or similar composition. This is particularly true for polyolefin catalysts. For example, it is known in the art that there are a number of Ziegler type catalysts for olefin polymerization having very similar composition, but these catalysts might exhibit different properties, such as activity, particle morphology, responsibility to hydrogen, copolymerization performance, etc. The reason is believed to be that the different catalysts prepared by different processes, even from the same raw materials by similar processes but in different reaction orders, have different structures.

Therefore, based on Best and Furuhashi et al., those skilled in the art could not reasonably expect a catalyst component as recited in the claims of the application to have the excellent properties, such as lower static charges, excellent flowability, good hydrogen response and copolymerization performance, and high polymerization activity, as described in the specification, the paragraph between pages 2 and 3 and as demonstrated in the Examples in comparison with the Comparative Examples.

In view of the above, it is respectfully submitted that all rejections and objections of record have been overcome and that the application is now in allowable form. An early notice of allowance is earnestly solicited and is believed to be fully warranted.

Respectfully submitted,

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